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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,321	12/04/2003	Tom Hopkins	HOP-1	7325
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LEIGH P. GREGORY			EXAMINER	
PO BOX 168			FERGUSON, LAWRENCE D	
CLEMSON, SC 29633-0168				
			ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			05/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/728,321

Applicant(s)

HOPKINS, TOM

Examiner

LAWRENCE D. FERGUSON

Art Unit

1794

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) 22-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed February 19, 2008.

Claims 1-10 and 12-20 are pending with claims 22-28 withdrawn as a non-elected invention, where claims 11 and 21 were previously cancelled.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections – 35 USC § 102(b)

3. Claims 1-3, 6-10, 12-14, 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsui et al (U.S. 4,996,182).

Matsui discloses a multilayer oriented thermoplastic composite for use in printing devices (column 1, line 66 through column 2, line 36) comprising a resin film, a core layer and a heat sensitive recording layer, where an anti-static agent can be coated on the resin film (column 3, lines 48-50 and column 4, lines 18-20). Matsui further discloses pigments can be added to the resin film (column 3, lines 43-48) as in claims 1 and 12. The composite appears to be non-heat shrinkable, as Matsui does not disclose it to be heat shrinkable. The substrate has a thickness of 30 μ m and the heat sensitive layer has thickness as low as 2 g/m² (column 4, lines 5-10 and column 6, lines 50-53). Matsui

discloses the film layer comprises a cavity content (column 9, lines 20-28) as in claim 6 and the film comprises polyethylene (column 3, lines 9-17) as in claims 8 and 18. The composition can be biaxially oriented or oriented in the machine direction (column 2, lines 22-36 and column 9, lines 20-27) as in claims 9-10 and 19-20. Because Matsui discloses a multilayer oriented thermoplastic composite with equivalent layers as the claimed invention, it is inherent for the composite to have a secant modulus as in instant claims 1, 7, 12 and 17. Recitation of a newly disclosed property does not distinguish over a reference disclosure of the article or composition claims. *General Electric v. Jewe Incandescent Lamp Co.*, 67 USPQ 155. *Titanium Metal Corp. v. Banner*, 227 USPQ 773. Applicant bears responsibility for proving that reference composition does not possess the characteristics recited in the claims. *In re Fitzgerald*, 205 USPQ 597, *In re Best*, 195 USPQ 430.

Claim Rejections – 35 USC § 103(a)

4. Claims 4-5 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al (U.S. 4,996,182).

Matsui is relied upon for instant claims 1 and 12 as above. Matsui does not specifically disclose the multilayer composite has a thickness, as in claims 4-5 and 15-16. Applicant fails to disclose any criticality with respect to the recited "thickness of from about 0.05 mils to about 0.75 mils or 0.35 to about 1.5mils." Therefore, in the absence of any evidence to the contrary, it would have been obvious to one of ordinary skill in

the art to optimize the composite because discovering the optimum or workable range involves only routine skill in the art. The thickness directly affects the flexibility of the composite material. *In re Aller* 105 USPQ 233 and see *In re Boesch*, 617 USPQ 215. In the absence of evidence of criticality for the thickness by Applicant, it is obvious to optimize the composite. Additionally, there is also no clear teaching away from the claimed thickness of the composite material by Matsui, as the reference does not exclude any thicknesses for the composite material.

Response to Arguments

5. Applicant's argument regarding the rejection made under U.S.C. 102(b) as being anticipated by Matsui et al (U.S. 4,996,182) have been considered but are unpersuasive. Applicant argues in some cases the Young's modulus and 1% secant modulus are equal in films, but in the instant films we can approximate that the 1% secant modulus of a film will always be equal to or less than the Young's modulus of that same film, where the lowest workable cavity content according to Matsui has a Young's modulus in the machine direction of approximately 102 kg/mm² (145,000psi). Therefore, Applicant concludes that Matsui does not disclose a film having a 1% secant modulus in the machine direction of at least 150,000psi.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Matsui does not disclose a film having a 1% secant modulus in the machine direction of at least 150,000psi) are not recited in the rejected claim(s). Although the

claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In claims 1 and 12, Applicant claims a composite having a 1% secant modulus in the machine direction of at least *about* 150,000 psi. In this instance, the phrase, "at least about 150,000 psi" is interpreted as including 145,000 psi. Additionally, Matsui does not disclose that the lowest workable cavity content is 40cc/100g. Matsui discloses at a lower cavity content than 40cc/100g, it is hard to obtain a good image and opacity becomes inferior (column 2, lines 53-58); however, this does not suggest that lower cavity contents and higher Young's modulus cannot be achieved by the composite of Matsui, it suggests that the quality of the composite material is not at its highest.

Applicant's argument regarding the rejection made under 35 U.S.C. 103(a) as being unpatentable Matsui et al (U.S. 4,996,182) have been considered, but are unpersuasive. Applicant continues to argue that Matsui does not disclose a film having a 1% secant modulus in the machine direction of at least 150,000psi. Because this argument has been addressed previously, the rejection made under 35 U.S.C. 103(a) is maintained for reasons of record.

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks, can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/L. Ferguson/
Patent Examiner

/Bruce H Hess/
Primary Examiner, Art Unit 1794